```
FILE 'MEDLINE'
FILE 'JAPIO'
FILE 'BIOSIS'
FILE 'SCISEARCH'
FILE 'WPIDS'
FILE 'CAPLUS'
FILE 'EMBASE'
=> s human membrane-associated protein# or human membrane associated protein#
   3 FILES SEARCHED...
            49 HUMAN MEMBRANE-ASSOCIATED PROTEIN# OR HUMAN MEMBRANE ASSOCIATED
               PROTETN#
=> s humap or humap-9 or humap 9
            3 HUMAP OR HUMAP-9 OR HUMAP 9
=> dup rem 12
PROCESSING COMPLETED FOR L2
              2 DUP REM L2 (1 DUPLICATE REMOVED)
=> dup rem 11
PROCESSING COMPLETED FOR L1
             25 DUP REM L1 (24 DUPLICATES REMOVED)
=> d abs 14 1-25
    ANSWER 1 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
     Protein kinase-encoding genes that are expressed at abnormally increased
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- ANSWER 1 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
  Protein kinase-encoding genes that are expressed at abnormally increased levels in human cancer tissues (colon, lung, breast and prostate) relative to corresponding cancer-free tissues are identified. Forty-four cancer-related protein kinase genes were identified by two-tier statistical anal. and transmembrane hidden Markov model algorithm anal. of gene expression data generated from the Affymetrix MG U95 microarray. These genes or their products can be used as markers for the detection of resp. cancers. Modulators of these genes or their products can be used for the treatment or prevention of resp. cancers. [This abstr. record is one of ten records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].
- ANSWER 2 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2 The invention relates to compns., kits, and methods for diagnosing, staging, prognosing, monitoring and treating human prostate cancers. A variety of marker genes are provided, wherein changes in the levels of expression of one or more of the marker genes is correlated with the presence of prostate cancer. In particular, three sets of the marker genes, corresponding to 11617 GenBank Accession Nos. (only 2168 new submissions) and 15 SEQ IDs, are identified by transcription profiling using RNA derived from clin. samples, that were expressed at least 2-fold or greater than the normal controls. Using TNM staging approach, these markers are divided to three groups, ones can be used to det. whether prostate cancer has metastasized, or is likely to metastasize, to the liver (M stage); ones can be used to det. whether prostate cancer has metastasized, or is likely to metastasize, to the bone (M stage); and ones can be used to det. whether prostate cancer has metastasized, or is likely to metastasize, to the lymph nodes (N stage and/or M stage). The invention also relates to a kit for assessing the specific type of metastatic prostate cancer, e.g., cancer that has metastasized to the liver, bone or lymph nodes. [This abstr. record is one of three records

for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

ANSWER 3 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN The present invention relates to novel polynucleotides assocd. with the AB plasma membrane, the polypeptides encoded by these polynucleotides herein collectively referred to as "plasma membrane assocd. antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such plasma membrane assocd. polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders related to these novel polypeptides. More specifically, isolated nucleic acid mols. are provided encoding novel plasma membrane assocd. polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing these plasma membrane assocd. polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the novel polypeptides of the invention. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compns. for inhibiting or promoting the prodn. and/or function of the polypeptides of the invention. The Sequence Listing (total 2876 SEQ IDs) was provided as an electronic file, but the descriptive Table 1 available only on CD-ROM was not accessible.

ANSWER 4 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

The invention provides 1995 human cDNAs with a high fullness ratio, and which encode full-length polypeptides, which were obtained by the oligo-capping method. None of the clones are identical to any known human mRNAs selected by searching 5'-end sequences and mRNA sequences with the annotation of "complete cds" in the GenBank and UniGene (Human) databases using BLAST homol. The full-length nucleotide sequences of the cDNA and amino acid sequences encoded by the nucleotide sequences were detd.

Because the cDNA of the present invention are full-length and contain the translation start site, they provide information useful for analyzing the functions of the polypeptide. Gene expression profiles of the cDNA clones were studied by analyzing the large-scale cDNA database constructed based on the 5'-end nucleotide sequences, and gene functions were revealed by homol. searching and anal. of expression profiles in silico.

1.4 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3 The present invention is based on the elucidation of global changes in gene expression in peripheral blood leukocytes (PBL) of patients with glomerular diseases exhibiting different types of clin. and pathol. features of glomerular nephropathy as compared to normal PBL as well as the identification of individual genes that are differently expressed in PBL of patients with glomerular diseases. The genes and gene expression information may be used as markers for the diagnosis of disease subtype, such as IgA nephropathy, Minimal Change nephrotic syndrome, antineutrophil cytoplasmic antibody-assocd. glomerulonephritis (ANCA), focal segmental glomerulosclerosis (FSGS), and lupus nephritis. The genes may also be used as markers to evaluate the effects of a candidate drug or agent on tissues, including PBLs, particularly PBLs undergoing activation or PBLs from a patient with glomerular disease. Differential expression of genes between PBLs from patients with glomerular disease and normal PBL samples was detd. using the Affymetrix 42K human gene chip set. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

ANSWER 6 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

The authors disclose the gene expression profile for endothelial cells derived from normal and malignant colorectal tissues. Comparison between normal-and tumor-derived endothelium revealed differentially expressed genes, including many that were specifically elevated in tumor-assocd. endothelium. Expts. with representative genes from this group demonstrated that most were similarly expressed in the endothelium of primary lung, breast, brain, and pancreatic cancers as well as in metastatic lesions of the liver. These results demonstrate that neoplastic and normal endothelium in humans are distinct at the mol.

- L4 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

  AB The invention provides isolated nucleic acids mols., designated 16051a, 16051b, 58199, 57805, 56739, 39362, and 23228 nucleic acid mols., which encode novel \*\*\*human\*\*\* \*\*\*membrane\*\*\* \*\*\*assocd\*\*\* .
  - \*\*\*protein\*\*\* family members, and human cell surface protein family members. The invention also provides antisense nucleic acid mols., recombinant expression vectors contg. 16051a, 16051b, 58199, 57805, 56739, 39362, or 23228 nucleic acid mols., host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 16051a, 16051b, 58199, 57805, 56739, 39362, or 23228 gene has been introduced or disrupted. The invention still further provides isolated 16051a, 16051b, 58199, 57805, 56739, 39362, or 23228 proteins, fusion proteins, antigenic peptides and anti-16051a, 16051b, 58199, 57805, 56739, 39362, or 23228 antibodies. The cDNA sequences and the encoded amino acid sequences of the polypeptides of the invention are provided.

    Tissue-specific expression profiles and structural motifs of the polypeptides are provided. Diagnostic and drug screening methods utilizing compns. of the invention are also provided.
- ANSWER 8 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

  The human gut is colonized with a vast community of indigenous microorganisms that help shape our biol. The complete genome sequence is now presented for the Gram-neg. anaerobe Bacteroides thetaiotaomicron, a dominant member of our normal distal intestinal microbiota. Its 4779-member proteome includes an elaborate app. for acquiring and hydrolyzing otherwise indigestible dietary polysaccharides and an assocd. environment-sensing system consisting of a large repertoire of extracytoplasmic function sigma factors and one- and two-component signal transduction systems. These and other expanded paralogous groups shed light on the mol. mechanisms underlying symbiotic host-bacterial relationships in our intestine. The genome sequence is deposited in GenBank/EMBL/DDBJ under accession no. AE015928 and in the RefSeq database under accession no. NC\_004663.
- ANSWER 9 OF 25 MEDLINE on STN DUPLICATE 4

  Renal reabsorption is the main mechanism that controls mannose homeostasis. This takes place through a specific Na-coupled uphill transport system, the molecular identity of which is unknown. We prepared and screened a size-selected rat kidney cortex cDNA library through the expression of mannose transport in Xenopus laevis oocytes. We have identified a membrane protein that induces high-affinity and specific Na-dependent transport of d-mannose and d-glucose in X. laevis oocytes, most likely through stimulation of the capacity of an endogenous transport system of the oocyte. Sequencing has revealed that the cDNA encodes the counterpart of the \*\*\*human\*\*\* \*\*\*membrane\*\*\* \*\*\*associated\*\*\* \*\*\*protein\*\*\* MAP17, previously known by its overexpression in renal,

\*\*\*protein\*\*\* MAP17, previously known by its overexpression in renal, colon, lung, and breast carcinomas. We show that MAP17 is a 12.2-kDa nonglycosylated membrane protein that locates to the brush-border plasma membrane and the Golgi apparatus of transfected cells and that it is expressed in the proximal tubules of the kidney cortex and in the spermatids of the seminiferous tubules. It spans twice the cell membrane, with both termini inside the cell, and seems to form homodimers through intracellular Cys55, a residue also involved in transport expression.

MAP17 is responsible for mannose transport expression in oocytes by rat kidney cortex mRNA. The induced transport has the functional characteristics of a Na-glucose cotransporter (SGLT), because d-glucose and alpha-methyl-d-glucopyranoside are also accepted substrates that are inhibited by phloridzin. The corresponding transporter from the proximal tubule remains to be identified, but it is different from the known mammalian SGLT-1, -2, and -3.

- L4 ANSWER 10 OF 25 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
- AN 2002-305578 [35] WPIDS
- AB CN 1333253 A UPAB: 20020603
  - NOVELTY A \*\*\*human\*\*\* \*\*\*membrane\*\*\* \*\*\*associated\*\*\*

    \*\*\*protein\*\*\* 32.78, encoding polynucleotide and producing this
    polypeptide by DNA recombination technology, are new. The protein is
    useful for treating hormone metabolism disturbance disease and nervous
    system dysfunction disease. Also disclosed are an antagonist for resisting

the polypeptide and its therapeutic action, and the application of the encoding polynucleotide.  $\ensuremath{\text{Dwg.0/0}}$ 

L4 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

AΒ

The invention provides isolated nucleic acids that encode human kidney tumor overexpressed membrane protein 1 (KTOM1), which has two isoforms, KTOM1a and KTOM1b, and has protein-protein interaction activity and high expression in kidney tumors. KTOM1a shares certain protein domains and an overall structural organization with other proteins that contain caldesmon and ERM (ezrin/radixin/moesin) motifs as well as a leucine-rich repeat (LRR) motif with five leucine-rich domains. KTOM1a is expressed in liver, bone marrow, brain, heart, lung, kidney, colon, muscle, testis, uterus, and placenta. The KTOMla gene is organized with 25 exons on human chromosome 2q35. The invention also relates to KTOM1 fragments, vectors for propagating and expressing human KTOM1 nucleic acids, host cells comprising the nucleic acids and vectors of the present invention, proteins, protein fragments, and protein fusions of the novel human KTOM1 isoforms, and antibodies thereto. The invention further provides transgenic cells and non-human organisms comprising human KTOM1 nucleic acids, and transgenic cells and non-human organisms with targeted disruption of the endogenous ortholog of the human KTOM1 gene. The invention further provides pharmaceutical formulations of the nucleic acids, proteins, and antibodies of the present invention, and diagnostic, investigational, and therapeutic methods based on the human KTOM1 nucleic acids, proteins, and antibodies of the present invention.

L4 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

L4 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

The invention provides protein and cDNA sequences of a novel human protein, designated 58199, which has sequence homol. with membrane-assocd. proteins. The invention also provides antisense nucleic acid mols., recombinant expression vectors contg. 58199 nucleic acid mols., host cells into which the expression vectors have been introduced, and non-human transgenic animals in which a 58199 gene has been introduced or disrupted. The invention still further provides isolated 58199 proteins, fusion proteins, antigenic peptides and anti-58199 antibodies. Diagnostic methods utilizing compns. of the invention are also provided.

- L4 ANSWER 14 OF 25 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- L4 ANSWER 15 OF 25 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 5

AN 2001-168860 [17] WPIDS

AB WO 200112662 A UPAB: 20011129

NOVELTY - An isolated polypeptide (I) with a \*\*\*human\*\*\*
 \*\*\*membrane\*\*\* \*\*\*associated\*\*\* \*\*\*protein\*\*\* (MEMAP) sequence, is new.

DETAILED DESCRIPTION - An isolated polypeptide (I) comprises an amino acid (aa) sequence of one of 34 \*\*\*human\*\*\* \*\*\*membrane\*\*\*

\*\*\*associated\*\*\* \*\*\*protein\*\*\* (MEMAP) sequences given in the specification, a sequence with at least 70% identity to the MEMAP sequences, or a biologically active fragment or immunogenic fragment of the MEMAP sequences.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polynucleotide (II) encoding (I);
- (2) an isolated polynucleotide comprising:
- (a) a sequence with at least 90% polynucleotide sequence identity to the sequence of (II),
  - (b) a sequence complementary to (II);
  - (c) a sequence complementary to (a); or
  - (d) an RNA equivalent of (a)-(c);
  - (3) a recombinant polypeptide (III) comprising a promoter sequence

linked operably to (II);

- (4) a cell transformed with (III);
- (5) a transgenic organism transformed with (III);
- (6) an isolated polynucleotide comprising at least 60 contiguous nucleotides of (II);
- (7) a method for detecting a target polynucleotide in a sample comprising:
- (a) hybridizing the sample with a probe containing at least 20 contiguous nucleotides of a sequence complementary to the target polynucleotide; and
- (b) detecting the presence or absence of the hybridization complex and optionally the amount of complex formed;
- (8) a method for detecting a target polynucleotide in a sample comprising:
- (a) amplifying the target polynucleotide or a polynucleotide fragment by polymerase chain reaction; and
- (b) detecting the presence or absence and optionally the amount of the polynucleotide in the sample;
- (9) a method for producing (I) comprising culturing the host cell of (4) and recovering the polypeptide from the host cell culture;
  - (10) an isolated antibody which specifically binds to (I);
- (11) a method of screening for a compound effective as an agonist or antagonist of (I) by exposing a sample comprising (I) to a test compound and detecting agonist or antagonist activity in the sample;
- (12) a method of screening for a compound that specifically binds to(I) by combining (I) with a test compound under suitable conditions and detecting binding of the test compound to (I);
- (13) a method of screening for a compound that modulates activity of (I) by combining (I) with a test compound under suitable conditions, assessing the activity of (I) in the presence of the test compound and comparing the activity to that in the absence of the test compound;
- (14) a method for screening a compound for effectiveness in altering expression of (II) comprising exposing a sample comprising (II) to a test compound and detecting altered expression of (II); and
  - (15) a method for assessing toxicity of a test compound comprising:
- (a) treating a biological sample containing nucleic acids with the test compound;
- (b) hybridizing the nucleic acids in the sample with a probe comprising at least 20 nucleotides of (II);
  - (c) detecting the amount of hybridization complex formed; and
- (d) comparing the amount formed in the treated sample to the amount from an untreated sample where a difference is indicative of toxicity of the test compound.

ACTIVITY - Cytostatic; antiinflammatory; anticonvulsant; immunosuppressive; antiarteriosclerotic; antidiarrheic.

No biological data is given.

 ${\tt MECHANISM}$  OF ACTION - Gene therapy; antagonist or agonist of human membrane associated proteins.

USE - (I) and an agonist of (I) are used to treat a disease or condition associated with decreased expression of functional MEMAP and antagonists of (I) are used to treat a disease or condition associated with overexpression of functional MEMAP (claimed). These disorders include cell proliferative, autoimmune/inflammatory, neurological and gastrointestinal disorders. The polynucleotides and polypeptides are also used for the diagnosis of these disorders.

Specific examples of these disorders include cancer, inflammation, atherosclerosis, epilepsy and diarrhea.

(I) can be used to screen for compounds which specifically bind MEMAP (claimed) including antibodies, oligonucleotides, proteins and small molecules. (II) can be used to prepare transgenic animals which can be studied to provide information concerning human disease.

Anti-MEMAP antibodies are useful in immunoassays for the detection of MEMAP protein and can be used as antagonists to treat or prevent a disorder associated with MEMAP. Polynucleotides encoding MEMAP can be delivered to target cells with genetic abnormalities with respect to the expression of MEMAP to treat or prevent a disorder associated with MEMAP. Dwg.0/0

ANSWER 16 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

The invention provides cDNA sequences of a novel \*\*\*human\*\*\*

placenta brain, which has sequence homol. with human Copines I protein family. The invention also relates to constructing membrane-assocd. protein 37 gene expression vectors to prep. recombinant membrane-assocd. protein 37 protein using Escherichia coli cells or eukaryotic cells. Methods of expressing and prepg. recombinant membrane-assocd. protein 37 protein and its antibody are described. Methods of using membrane-assocd. protein 37 gene or protein products for the treatment of various kinds of diseases, such as cancer, blood diseases, HIV infection, immune diseases and inflammation are also disclosed.

ANSWER 17 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

Primers for synthesizing full-length cDNAs and their use are provided.

Eight hundred thirty cDNAs encoding human proteins were isolated and nucleotide sequences of 5'-, and 3'-ends of the cDNAs were detd.

Furthermore, primers for synthesizing the full-length cDNA are provided to clarify the function of the protein encoded by the cDNA. The full-length cDNAs of the present invention contg. the translation start sites provide information useful for analyzing the functions of the proteins. Tissue expression profiles and homol. comparisons with sequences from public databases are provided for each of the 830 cDNA clones.

ANSWER 18 OF 25 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 6

AN 2000-687346 [67] WPIDS

AB WO 200065054 A UPAB: 20011129

NOVELTY - An isolated \*\*\*human\*\*\* \*\*\*membrane\*\*\*

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polynucleotide (II) or its complement encoding (I), consisting of a sequence (S2) of 1147, 1260, 2387, 2172, 2328, 1361, 789, 1793, 3694, 2000, 2973, 2394, 1853, 3617, 1029, 1923 or 837 bp (or a naturally occurring polynucleotide sequence having 90% sequence identity to S2) or an RNA equivalent of (II), all given in the specification;
- (2) a recombinant polynucleotide (III) comprising a promoter sequence operably linked to (II);
  - (3) a cell transformed with (III);
  - (4) preparation of (I);
  - (5) a transgenic organism comprising (III);
  - (6) an antibody (IV) which binds to (I);
- (7) an isolated polynucleotide comprising at least 60 contiguous nucleotides of (II);
- (8) a composition (V) comprising (I), and an agonist or antagonist compound identified using (I); and
- (9) a method (VI) for detecting a target polynucleotide having the sequence of (II) in a sample by hybridizing the sample with a probe comprising at least 16 contiguous nucleotides complementary to and hybridizing to the target polynucleotide in the sample, and detecting the presence or absence of the hybridization complex.

ACTIVITY - Antiarteriosclerotic; cytostatic; antiinflammatory; immunosuppressive; antianemic; anticonvulsant; ophthalmological; antithyroid; antidiabetic; gynecological; osteopathic; nephrotropic.

No biological data is given.

MECHANISM OF ACTION - Modulator of cell signaling, differentiation and proliferation.

No biological data is given.

USE - (I) is useful for screening a compound for effectiveness as an agonist or antagonist of (I). (I) or the identified agonist or antagonist is useful for treating a disease or condition associated with decreased or increased expression of functional HUMAP. (II) is also useful for screening a compound for effectiveness in altering expression of a target polynucleotide comprising the sequence of (II). Diseases treated include cell proliferative disorders such as actinic keratosis, arteriosclerosis, cancer (including breast, bladder, bone marrow, brain and uterus cancer), cell differentiation disorders including developmental disorders such as renal tubular acidosis, anemia, Cushing's syndrome, epilepsy, a disorder of cell signaling including endocrine disorders such as disorders of the hypothalamus and pituitary resulting from lesions such as thrombosis,

infections, immunological disorders and complications due to head trauma, disorders associated with hyperpituitarism including acromegaly, disorders associated with hypothyroidism including goiter, hyperparathyroidism, pancreatic disorders such as Type I or Type II diabetes mellitus, infertility, endometriosis, osteoporosis, hypergonadal disorders associated with Leydig cell tumors and gynecomastia. Antibodies which specifically bind HUMAP may be used for the diagnosis of disorders associated with the expression of HUMAP, or in assays to monitor patients being treated with HUMAP or agonists, antagonists or inhibitors of HUMAP. Dwg.0/0

- ANSWER 19 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

  The present invention provides protein and cDNA sequences for a newly identified \*\*\*human\*\*\* \*\*\*membrane\*\*\* \*\*\*assocd\*\*\* .

  \*\*\*protein\*\*\* gene, designated Zsig-43, which is believed to be a receptor. Receptors perform many functions that are essential for the metab. and differentiation of cells. As such, this class of proteins often provides targets for therapeutically useful drugs. Zsig-43 protein comprises a secretory signal sequence, an extracellular domain, a transmembrane domain, and an intracellular domain contg. a putative SH2 binding domain. The Zsig-43 gene resides on human chromosome 17 at 17q21.1. The invention also relates to the tissue distribution of Zsig-43 mRNA.
- ANSWER 20 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN L4 Surface mols. involved in human T cell activation were investigated using AR. a newly developed monoclonal antibody (H47 mAb). H47 antigen (Ag) recognized by H47 mAb was expressed on approx. 10% of resting T cells (mostly CD4-CD8+), 30% of PMA-activated T cells (both CD4+CD8- and CD4-CD8+), and most NK, B cells, and monocytes in the peripheral blood mononuclear cells (PBMC). H47 mAb immunopptd. a 100 or 120-kD mol. wt. (MW) membrane protein of T cells and monocytes under nonreducing or reducing conditions, resp., suggesting that H47 Ag consists of a single polypeptide that has intramol. disulfide bonds. H47 mAb significantly enhanced PMA-induced proliferation of PBMC in a monocyte-independent fashion. H47 mAb, however, failed to enhance T cell proliferation induced by anti-CD3 mAb, anti-CD2 mAb, or phytohemagglutinin (PHA). H47 mAb also enhanced PMA-induced interleukin-2 receptor (IL-2R) expression and IL-2 synthesis, but did not induce a change in intracellular free calcium ([Ca2+]i) of T cells. These results suggest that H47 Ag is a new membrane mol. involved in PMA-induced T cell activation.
- L4 ANSWER 21 OF 25 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- L4 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
- AB Overlapping cDNAs 3.8 kb in length contg. a long open reading frame were obtained that hybridized exclusively to transcripts from hematopoietic cells. Sequence anal. found 8 potential membrane domains and 2 possible cAMP/cGMP phosphorylation sites. This sequence exhibited no homologies with the EMBL/Genbank nucleic acid SwissProt or GenPept amino acid data bases. The gene is located at 12q13.1, a region of occasional translocations in hematopoietic neoplasia and a rare folic acid fragile site, Fra 12A.
- L4 ANSWER 23 OF 25 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- L4 ANSWER 24 OF 25 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AB A comparison was made of the binding modes of the bacterial cell wall precursor L-lysyl-D-alanyl-D-alanine to the glycopeptide antibiotic vancomycin and to the D-alanyl-D-alanine-cleaving peptidase of Streptomyces sp. strain R61, a model for cell wall-synthesizing enzymes whose X-ray three-dimensional structure is established. In each of the two pairings (vancomycin with peptide and DD-peptidase with peptide), polypeptide backbones were antiparallel, and the antibiotic or enzyme enveloped the peptide substrate from opposite sides. Hydrogen-bonding groups on the substrate which are involved with the DD-peptidase were shown to be different from the ones reported from nuclear magnetic resonance studies to be involved with vancomycin. Because of steric

hindrance, the binding of either molecule to the substrate prevents the binding of the other molecule. Binding to the substrate by a D-alanyl-D-alanine-recognizing protein in a manner similar to that used by the DD-peptidase could explain recent observations of vancomycin resistance, in which a new membrane-associated protein has been detected.

ANSWER 25 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN T.4 Protein kinase C activity was studied in superoxide-producing human polymorphonuclear leukocytes. Using equiv. cell concns., superoxide prodn. and particulate fraction-assocd. protein kinase C activity increased in parallel in phorbol 12-myristate 13-acetate (PMA), oleoyl-acetyl-glycerol (OAG), opsonized zymosan, and A23187-activated leukocytes. An increase in particulate fraction-assocd. phospholipid-independent protein kinase activity was obsd. upon stimulation with these activators. In contrast, in formyl-Met-Leu-Phe (FMLP) -activated cells the increase in superoxide prodn. was only accompanied by an increase in particulate fraction-assocd. protein kinase C activity if the cells were pretreated with cytochalasin B. Purified protein kinase C activity was stimulated by OAG and PMA, whereas no stimulation was obsd. using A23187 or opsonized zymosan. It is suggested that the activation induced in human neutrophils by PMA, OAG, opsonized zymosan, and A23187 involves a tight membrane assocd. of phospholipid-dependent and -independent protein kinase activity. This contrasts to FMLP-activated neutrophils, in which a membrane-bound form is only obsd. after pretreatment with cytochalasin B.

# => d ibib abs 13 1-2

L3 ANSWER 1 OF 2 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 1

ACCESSION NUMBER: 2000-687346 [67] WPIDS

DOC. NO. NON-CPI: N2000-508144

DOC. NO. CPI: C2000-209235

TITLE: Human membrane-associated protein, useful for diagnosis and treatment of cell signaling, cell differentiation and cell proliferation disorders such as cancer, and for identifying agonists and antagonists.

B04 D16 S03

INVENTOR(S): AZIMZAI, Y; BANDMAN, O; BAUGHN, M R; HILLMAN, J L; LAL,

P; REDDY, R; TANG, Y T; YUE, H

PATENT ASSIGNEE(S): (INCY-N) INCYTE GENOMICS INC

COUNTRY COUNT:

DERWENT CLASS:

PATENT INFORMATION:

| PATENT NO | KINI | DATE | WEEK | LA | PG |
|-----------|------|------|------|----|----|
|           |      |      |      |    |    |

WO 2000065054 A2 20001102 (200067) \* EN 99

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU'AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 2000044835 A 20001110 (200109) EP 1173566 A2 20020123 (200214) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 2002542782 W 20021217 (200312)

## APPLICATION DETAILS:

| PATENT NO     | KIND | APPLICATION     | DATE     |  |  |
|---------------|------|-----------------|----------|--|--|
| WO 2000065054 | A2   | WO 2000-US10884 | 20000420 |  |  |
| AU 2000044835 | Α    | AU 2000-44835   | 20000420 |  |  |
| EP 1173566    | A2   | EP 2000-926278  | 20000420 |  |  |
|               |      | WO 2000-US10884 | 20000420 |  |  |
| JP 2002542782 | W    | JP 2000-614390  | 20000420 |  |  |
|               |      | WO 2000-US10884 | 20000420 |  |  |

## FILING DETAILS:

PATENT NO KIND PATENT NO

AU 2000044835 A Based on WO 2000065054
EP 1173566 A2 Based on WO 2000065054
JP 2002542782 W Based on WO 2000065054

PRIORITY APPLN. INFO: US 1999-140580P 19990623; US 1999-130694P 19990423

AN 2000-687346 [67] WPIDS

AB WO 200065054 A UPAB: 20011129

NOVELTY - An isolated human membrane-associated protein ( \*\*\*HUMAP\*\*\* ) polypeptide (I) consisting of a sequence (S1) selected from \*\*\*HUMAP\*\*\* 1-17 of 160, 359, 299, 599, 479, 475, 667, 443, 651, 96, 202, 328, 265, 396, 563, 161 and 175 amino acids respectively, (or a naturally occurring sequence having 90% sequence identity to S1) defined in the specification, is new.

 ${\tt DETAILED}$  <code>DESCRIPTION</code> - <code>INDEPENDENT</code> <code>CLAIMS</code> are also included for the following:

- (1) an isolated polynucleotide (II) or its complement encoding (I), consisting of a sequence (S2) of 1147, 1260, 2387, 2172, 2328, 1361, 789, 1793, 3694, 2000, 2973, 2394, 1853, 3617, 1029, 1923 or 837 bp (or a naturally occurring polynucleotide sequence having 90% sequence identity to S2) or an RNA equivalent of (II), all given in the specification;
- (2) a recombinant polynucleotide (III) comprising a promoter sequence operably linked to (II);
  - (3) a cell transformed with (III);
  - (4) preparation of (I);
  - (5) a transgenic organism comprising (III);
  - (6) an antibody (IV) which binds to (I);
- (7) an isolated polynucleotide comprising at least 60 contiguous nucleotides of (II);
- (8) a composition (V) comprising (I), and an agonist or antagonist compound identified using (I); and
- (9) a method (VI) for detecting a target polynucleotide having the sequence of (II) in a sample by hybridizing the sample with a probe comprising at least 16 contiguous nucleotides complementary to and hybridizing to the target polynucleotide in the sample, and detecting the presence or absence of the hybridization complex.

ACTIVITY - Antiarteriosclerotic; cytostatic; antiinflammatory; immunosuppressive; antianemic; anticonvulsant; ophthalmological; antithyroid; antidiabetic; gynecological; osteopathic; nephrotropic.

No biological data is given.

 ${\tt MECHANISM}$  OF ACTION - <code>Modulator</code> of cell signaling, differentiation and proliferation.

No biological data is given.

 $\ensuremath{\mathtt{USE}}$  - (I) is useful for screening a compound for effectiveness as an agonist or antagonist of (I). (I) or the identified agonist or antagonist is useful for treating a disease or condition associated with decreased or increased expression of functional \*\*\*HUMAP\*\*\* . (II) is also useful for screening a compound for effectiveness in altering expression of a target polynucleotide comprising the sequence of (II). Diseases treated include cell proliferative disorders such as actinic keratosis, arteriosclerosis, cancer (including breast, bladder, bone marrow, brain and uterus cancer), cell differentiation disorders including developmental disorders such as renal tubular acidosis, anemia, Cushing's syndrome, epilepsy, a disorder of cell signaling including endocrine disorders such as disorders of the hypothalamus and pituitary resulting from lesions such as thrombosis, infections, immunological disorders and complications due to head trauma, disorders associated with hyperpituitarism including acromegaly, disorders associated with hypothyroidism including goiter, hyperparathyroidism, pancreatic disorders such as Type I or Type II diabetes mellitus, infertility, endometriosis, osteoporosis, hypergonadal disorders associated with Leydig cell tumors and gynecomastia. Antibodies which specifically bind \*\*\*HUMAP\*\*\* may be used for the diagnosis of disorders associated with the expression of \*\*\*HUMAP\*\*\* , or in assays to monitor patients being treated with \*\*\*HUMAP\*\*\* or agonists, antagonists or inhibitors of \*\*\*HUMAP\*\*\* Dwg.0/0

ACCESSION NUMBER:

93:264817 SCISEARCH

THE GENUINE ARTICLE: KX957

TITLE:

FINE-STRUCTURES OF THE SUBCAPSULAR LYMPHATIC CAPILLARIES

\*\*\*HUMAP\*\*\* LIVER-SCANNING ELECTRON-MICROSCOPIC OF THE

STUDY USING THE CHEMICAL DIGESTION METHOD

AUTHOR:

NIIYAMA G (Reprint); SUGAHARA A; KIMURA T; TOKUMITSU S; KINOYAMA S; SATO H; KOBAYASHI T

KAWASAKI MED UNIV, KAWASAKI HOSP, DEPT INTERNAL MED,

CORPORATE SOURCE: COUNTRY OF AUTHOR:

JAPAN

SOURCE:

GASTROENTEROLOGY, (APR 1993) Vol. 104, No. 4, Supp. S, pp.

A964.

ISSN: 0016-5085.

DOCUMENT TYPE:

Conference; Journal

OKAYAMA 700, JAPAN

FILE SEGMENT:

LIFE; CLIN

LANGUAGE:

ENGLISH

REFERENCE COUNT: -

No References

#### => d ibib abs 14 1-24

ANSWER 1 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

ACCESSION NUMBER:

2004:705795 CAPLUS

DOCUMENT NUMBER:

141:223395

TITLE:

Protein kinases up-regulated in human cancer tissues

and their use for diagnosing and treating cancers

INVENTOR(S):

Brown, Eugene; Wei, Liu

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 125 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE:

English

LANGUAGE:

10

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

|      | PATENT NO. |       |          |      |            | D   | DATE APPLICATION |       |     |       |       |                 |     |       |      |       |     |
|------|------------|-------|----------|------|------------|-----|------------------|-------|-----|-------|-------|-----------------|-----|-------|------|-------|-----|
|      | WO 2004    | 0700  | <u>-</u> |      | À2         | -   | 2004             | 0010  |     |       |       | XI3371 20040204 |     |       |      |       |     |
|      | WO 2004    |       |          | אמ   |            |     |                  |       |     |       |       |                 |     | 7. 17 | _    |       |     |
|      | YV .       |       |          |      |            |     | AM,              |       |     |       |       |                 |     |       |      |       |     |
|      |            |       |          |      |            |     | BY,              |       |     |       |       |                 |     |       |      |       |     |
|      |            |       |          |      |            |     | DE,              |       |     |       |       |                 |     |       |      |       | -   |
|      |            |       |          |      |            |     | GE,              |       |     |       |       |                 |     |       | •    |       |     |
|      |            |       |          |      |            |     | KG,              |       |     |       |       |                 |     |       |      |       |     |
|      |            |       |          |      |            | LT, | LU,              | ьv,   | MA, | MD,   | MD,   | MG,             | MK, | MN,   | MW,  | MX,   | MX, |
|      | DE         |       |          | NA,  |            |     |                  |       | 25  | ~~    |       |                 |     |       |      |       |     |
|      | RW:        | BW,   |          |      |            |     |                  |       |     |       |       |                 | •   |       | •    | •     |     |
|      |            |       |          |      |            |     | DK,              |       |     |       |       |                 |     |       |      |       |     |
|      |            |       |          |      |            |     | SI,              |       |     |       |       |                 |     |       |      |       |     |
|      |            |       |          |      |            |     | SN,              |       |     | BF,   | ВJ,   | CF,             | CG, | CI,   | CM,  | GΑ,   | GN, |
|      |            |       |          | ML,  | -          |     | SN,              |       |     |       |       |                 |     |       |      |       |     |
|      | WO 2004    |       |          |      | <b>A</b> 2 |     | 2004             |       |     | WO 2  |       |                 |     |       |      | 0040  |     |
|      | W:         |       |          |      |            |     | ΑM,              |       |     |       |       |                 |     |       |      |       |     |
|      |            |       |          |      |            |     | BY,              |       |     |       |       |                 |     |       |      |       |     |
|      |            | CU,   | CU,      | CZ,  | CZ,        | DE, | DE,              | DK,   | DK, | DM,   | DΖ,   | EC,             | EC, | EE,   | EE,  | EG,   | ES, |
|      |            | ES,   | FI,      | FΙ,  | GB,        | GD, | GΕ,              | GΕ,   | GH, | GM,   | HR,   | HR,             | HŪ, | HU,   | ID,  | IL,   | IN, |
|      |            | IS,   | JΡ,      | JP,  | KΕ,        | KΕ, | KG,              | KG,   | ΚP, | ΚP,   | ΚP,   | KR,             | KR, | ΚZ,   | ΚZ,  | ΚZ,   | LC, |
|      |            | LK,   | LR,      | LS,  | LS,        | LT, | LU,              | LV,   | MA, | MD,   | MD,   | MG,             | MK, | MN,   | MW,  | MX,   | MX, |
|      |            | MZ,   | MZ,      | ÑΑ,  | NI         |     |                  |       |     |       |       |                 |     |       |      |       |     |
|      | RW:        | BW,   | GH,      | GM,  | KE,        | LS, | MW,              | ΜZ,   | SD, | SL,   | SZ,   | TZ,             | UG, | ZM,   | ZW,  | AT,   | BE, |
|      |            |       |          |      |            |     | DK,              |       |     |       |       |                 |     |       |      |       |     |
|      |            | MC,   | NL,      | PT,  | RO,        | SE, | SI,              | SK,   | TR, | BF,   | ВJ,   | CF,             | CG, | CI,   | CM,  | GA,   | GN, |
|      |            | GQ,   | GW,      | ML,  | MR,        | ΝE, | SN,              | TD,   | TG, | BF,   | ВJ,   | CF,             | CG, | CI,   | CM,  | GA,   | GN, |
|      |            | GQ,   | GW,      | ML,  | MR,        | NE, | SN,              | TD,   | TG  |       |       |                 |     |       |      |       | -   |
| PRIO | RITY APP   | LN. ] | INFO     | . :  |            |     |                  |       | 1   | US 20 | 003-4 | 4446            | 37P | 1     | 2 20 | 00302 | 204 |
|      |            |       |          |      |            |     |                  |       | 1   | WO 20 | 004-1 | JS33'           | 71  | 1     | A 20 | 00402 | 204 |
| AB   | Protein    | kina  | ase-e    | enco | ding       | gen | es tl            | nat a |     |       |       |                 |     |       |      |       | -   |

AB levels in human cancer tissues (colon, lung, breast and prostate) relative to corresponding cancer-free tissues are identified. Forty-four cancer-related protein kinase genes were identified by two-tier statistical anal. and transmembrane hidden Markov model algorithm anal. of gene expression data generated from the Affymetrix MG U95 microarray. These genes or their products can be used as markers for the detection of resp. cancers. Modulators of these genes or their products can be used for the treatment or prevention of resp. cancers. [This abstr. record is one of ten records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.1.

ANSWER 2 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2

ACCESSION NUMBER:

2004:85983 CAPLUS

DOCUMENT NUMBER:

140:194431

TITLE:

Human prostate cancer marker genes associated with

various metastatic stages identified by gene

profiling, and related compositions, kits, and methods

for diagnosis, prognosis and therapy Schlegel, Robert; Endege, Wilson O.

INVENTOR(S): PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc., USA

U.S. Pat. Appl. Publ., 131 pp.

SOURCE:

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

PATENT INFORMATION:

FAMILY ACC. NUM. COUNT:

| PATENT NO.             | KIND | DATE     | APPLICATION NO.   | DATE     |
|------------------------|------|----------|-------------------|----------|
| ~ ~                    |      |          |                   |          |
| US 2004009481          | A1   | 20040115 | US 2002-166883    | 20020611 |
| US 2004009481          | Al   | 20040115 | US 2002-166883    | 20020611 |
| PRIORITY APPLN. INFO.: |      |          | US 2001-297285P P | 20010611 |
|                        |      |          | 110 0000 100000   | 00000677 |

US 2002-166883 A 20020611 The invention relates to compns., kits, and methods for diagnosing, staging, prognosing, monitoring and treating human prostate cancers. A variety of marker genes are provided, wherein changes in the levels of expression of one or more of the marker genes is correlated with the presence of prostate cancer. In particular, three sets of the marker genes, corresponding to 11617 GenBank Accession Nos. (only 2168 new submissions) and 15 SEQ IDs, are identified by transcription profiling using RNA derived from clin. samples, that were expressed at least 2-fold or greater than the normal controls. Using TNM staging approach, these markers are divided to three groups, ones can be used to det. whether prostate cancer has metastasized, or is likely to metastasize, to the liver (M stage); ones can be used to det. whether prostate cancer has metastasized, or is likely to metastasize, to the bone (M stage); and ones can be used to det. whether prostate cancer has metastasized, or is likely to metastasize, to the lymph nodes (N stage and/or M stage). The invention also relates to a kit for assessing the specific type of metastatic prostate cancer, e.g., cancer that has metastasized to the liver, bone or lymph nodes. [This abstr. record is one of three records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

ANSWER 3 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2004:39703 CAPLUS

DOCUMENT NUMBER:

140:88775

TITLE:

Protein and cDNA sequences of novel human plasma membrane assocd. proteins, and their antibodies for

therapeutic uses

INVENTOR (S):

Birse, Charles E.; Rosen, Craig A.

PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 168 pp., Cont.-in-part of WO

2001 90,304. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 93

PATENT INFORMATION:

| PATENT NO.    | KIND       | DATE     | APPLICATION NO. | DATE     |
|---------------|------------|----------|-----------------|----------|
|               |            |          |                 |          |
| US 2004009491 | A1         | 20040115 | US 2002-264237  | 20021004 |
| AU 2001041411 | <b>A</b> 5 | 20010820 | AU 2001-41411   | 20010208 |

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WO 2001090304
                          A2
                                 20011129
                                             WO 2001-US16450
                                                                     20010518
     WO 2001090304
                                 20020510
                          A3
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             {\tt HR}, {\tt HU}, {\tt ID}, {\tt IL}, {\tt IN}, {\tt IS}, {\tt JP}, {\tt KE}, {\tt KG}, {\tt KP}, {\tt KR}, {\tt KZ}, {\tt LC}, {\tt LK}, {\tt LR}, {\tt LS},
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                  P 20000519
PRIORITY APPLN. INFO.:
                                             US 2000-205515P
                                             WO 2001-US16450
                                                                  A2 20010518
                                             US 2000-241221P
                                                                  P 20001020
                                             US 2000-241786P
                                                                  P 20001020
     The present invention relates to novel polynucleotides assocd. with the
     plasma membrane, the polypeptides encoded by these polynucleotides herein
     collectively referred to as "plasma membrane assocd. antigens," and
     antibodies that immunospecifically bind these polypeptides, and the use of
     such plasma membrane assocd. polynucleotides, antigens, and antibodies for
     detecting, treating, preventing and/or prognosing disorders related to
     these novel polypeptides. More specifically, isolated nucleic acid mols.
     are provided encoding novel plasma membrane assocd. polypeptides. Novel
     polypeptides and antibodies that bind to these polypeptides are provided.
     Also provided are vectors, host cells, and recombinant and synthetic
     methods for producing these plasma membrane assocd. polynucleotides,
     polypeptides, and/or antibodies. The invention further relates to
     diagnostic and therapeutic methods useful for diagnosing, treating,
     preventing and/or prognosing disorders related to the novel polypeptides
     of the invention. The invention further relates to screening methods for
     identifying agonists and antagonists of polynucleotides and polypeptides
     of the invention. The invention further relates to methods and/or compns.
     for inhibiting or promoting the prodn. and/or function of the polypeptides
     of the invention. The Sequence Listing (total 2876 SEQ IDs) was provided
     as an electronic file, but the descriptive Table 1 available only on
     CD-ROM was not accessible.
    ANSWER 4 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                          2004:677625 CAPLUS
DOCUMENT NUMBER:
                          141:219974
TITLE:
                         Full-length human cDNA and encoded protein sequences
                          and their expression profiles
INVENTOR (S):
                          Isogai, Takao; Yamamoto, Junichi; Nishikawa, Tetsuo;
                          Isono, Yuko; Sugiyama, Tomoyasu; Otsuki, Tetsuji;
                         Wakamatsu, Ai; Ishii, Shizuko; Nagai, Keiichi; Irie,
                         Ryotaro
PATENT ASSIGNEE(S):
                         Research Association for Biotechnology, Japan
                        Eur. Pat. Appl., 9244 pp.
SOURCE:
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
                                 20040818
     EP 1447413
                          A2
```

AB The invention provides 1995 human cDNAs with a high fullness ratio, and which encode full-length polypeptides, which were obtained by the oligo-capping method. None of the clones are identical to any known human mRNAs selected by searching 5'-end sequences and mRNA sequences with the annotation of "complete cds" in the GenBank and UniGene (Human) databases using BLAST homol. The full-length nucleotide sequences of the cDNA and amino acid sequences encoded by the nucleotide sequences were detd. Because the cDNA of the present invention are full-length and contain the translation start site, they provide information useful for analyzing the

functions of the polypeptide. Gene expression profiles of the cDNA clones were studied by analyzing the large-scale cDNA database constructed based on the 5'-end nucleotide sequences, and gene functions were revealed by homol. searching and anal. of expression profiles in silico.

ANSWER 5 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3

ACCESSION NUMBER:

2003:187091 CAPLUS

DOCUMENT NUMBER:

138:219713

TITLE:

Differentially expressed gene expression profiles in

human glomerular diseases

INVENTOR(S):

Munger, William E.; Falk, Ronald; Sun, Hongwei; Sasai,

Hitoshi; Waga, Iwao; Yamamoto, Jun

PATENT ASSIGNEE(S):

Gene Logic, Inc., USA; University of North Carolina At

Chapel Hill

SOURCE:

PCT Int. Appl., 781 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO.             |                 | APPLICATION NO.     |                 |  |  |  |
|------------------------|-----------------|---------------------|-----------------|--|--|--|
| WO 2003016476          | A2 20030227     | WO 2002-XH25766     | •               |  |  |  |
| W: AE. AG. AL.         | AM. AT. AU. AZ. | BA, BB, BG, BR, BY, | BZ. CA. CH. CN. |  |  |  |
|                        |                 | DZ, EC, EE, ES, FI, |                 |  |  |  |
| · · · · ·              |                 | JP, KE, KG, KP, KR, |                 |  |  |  |
|                        |                 | MK, MN, MW, MX, MZ, |                 |  |  |  |
|                        |                 | SI, SK, SL, TJ, TM, |                 |  |  |  |
| , , ,                  |                 | ZA, ZW, AM, AZ, BY, |                 |  |  |  |
| TJ, TM                 |                 |                     | , , , ,         |  |  |  |
| •                      | LS, MW, MZ, SD, | SL, SZ, TZ, UG, ZM, | ZW, AT, BE, BG, |  |  |  |
| CH, CY, CZ,            | DE, DK, EE, ES, | FI, FR, GB, GR, IE, | IT, LU, MC, NL, |  |  |  |
| PT, SE, SK,            | TR, BF, BJ, CF, | CG, CI, CM, GA, GN, | GQ, GW, ML, MR, |  |  |  |
| NE, SN, TD,            | TG              |                     |                 |  |  |  |
| WO 2003016476          | A2 20030227     | WO 2002-US25766     | 20020814        |  |  |  |
| WO 2003016476          | A3 20030508     |                     |                 |  |  |  |
| W: AE, AG, AL,         | AM, AT, AU, AZ, | BA, BB, BG, BR, BY, | BZ, CA, CH, CN, |  |  |  |
| CO, CR, CU,            | CZ, DE, DK, DM, | DZ, EC, EE, ES, FI, | GB, GD, GE, GH, |  |  |  |
| GM, HR, HU,            | ID, IL, IN, IS, | JP, KE, KG, KP, KR, | KZ, LC, LK, LR, |  |  |  |
| LS, LT, LU,            | LV, MA, MD, MG, | MK, MN, MW, MX, MZ, | NO, NZ, OM, PH, |  |  |  |
| PL, PT, RO,            | RU, SD, SE, SG, | SI, SK, SL, TJ, TM, | TN, TR, TT, TZ, |  |  |  |
| UA, UG, US,            | UZ, VC, VN, YU, | ZA, ZM, ZW, AM, AZ, | BY, KG, KZ, MD, |  |  |  |
| RU, TJ, TM             |                 |                     |                 |  |  |  |
| RW: GH, GM, KE,        | LS, MW, MZ, SD, | SL, SZ, TZ, UG, ZM, | ZW, AT, BE, BG, |  |  |  |
| CH, CY, CZ,            | DE, DK, EE, ES, | FI, FR, GB, GR, IE, | IT, LU, MC, NL, |  |  |  |
| PT, SE, SK,            | TR, BF, BJ, CF, | CG, CI, CM, GA, GN, | GQ, GW, ML, MR, |  |  |  |
| NE, SN, TD,            | TG              |                     |                 |  |  |  |
| PRIORITY APPLN. INFO.: |                 | US 2001-311837P     |                 |  |  |  |
|                        |                 | WO 2002-US25766     | A 20020814      |  |  |  |

The present invention is based on the elucidation of global changes in gene expression in peripheral blood leukocytes (PBL) of patients with qlomerular diseases exhibiting different types of clin. and pathol. features of glomerular nephropathy as compared to normal PBL as well as  $\ensuremath{\mathsf{PBL}}$ the identification of individual genes that are differently expressed in PBL of patients with glomerular diseases. The genes and gene expression information may be used as markers for the diagnosis of disease subtype, such as IgA nephropathy, Minimal Change nephrotic syndrome, antineutrophil cytoplasmic antibody-assocd. glomerulonephritis (ANCA), focal segmental glomerulosclerosis (FSGS), and lupus nephritis. The genes may also be used as markers to evaluate the effects of a candidate drug or agent on tissues, including PBLs, particularly PBLs undergoing activation or PBLs from a patient with glomerular disease. Differential expression of genes between PBLs from patients with glomerular disease and normal PBL samples was detd. using the Affymetrix 42K human gene chip set. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.1.

ANSWER 6 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 2004:3007 CAPLUS

DOCUMENT NUMBER: 140:75955 Membrane associated tumor endothelium markers TITLE: INVENTOR(S): St. Croix, Brad; Kinzler, Kenneth W.; Vogelstein, Bert Johns Hopkins University School of Medicine, USA PATENT ASSIGNEE(S): PCT Int. Appl., 107 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ \_\_\_\_ WO 2003-US19544 20030623 WO 2004001004 A2 20031231 WO 2004001004 A3 20040408 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2002-390187P P 20020621 US 2003-458959P P 20030401 endothelium. Expts. with representative genes from this group

The authors disclose the gene expression profile for endothelial cells derived from normal and malignant colorectal tissues. Comparison between normal-and tumor-derived endothelium revealed differentially expressed genes, including many that were specifically elevated in tumor-assocd. demonstrated that most were similarly expressed in the endothelium of primary lung, breast, brain, and pancreatic cancers as well as in metastatic lesions of the liver. These results demonstrate that neoplastic and normal endothelium in humans are distinct at the mol. level.

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ANSWER 7 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
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ACCESSION NUMBER:

2003:396360 CAPLUS

DOCUMENT NUMBER:

138:397892

TITLE:

Cloning, sequences, expression, and drug screening and

diagnostic use of novel \*\*\*human\*\*\*

\*\*\*membrane\*\*\* - \*\*\*associated\*\*\* \*\*\*protein\*\*\*

and cell surface protein family members

INVENTOR(S):

Meyers, Rachel E.; Glucksmann, Maria Alexandra; Curtis, Rory A. J.; Kapeller-Libermann, Rosana;

Bandaru, Rajasekhar; Leiby, Kevin R.

PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 332 pp., Cont.-in-part of U.S.

Ser. No. 836,499. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ 20030522 US 2002-162435 20020604 US 2003096305 A1 WO 2001079498 A2 20011025 WO 2001-US12420 20010417 20020530 WO 2001079498 A3 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

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BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           US 2001-836499
                                                                  20010417
    US 2003027316
                         AΊ
                               20030206
    WO 2001090145
                         A2
                               20011129
                                           WO 2001-US16013
                                                                   20010518
                               20020523
    WO 2001090145
                         A3
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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PRIORITY APPLN. INFO.:
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                                            WO 2001-US41811
                                                                W 20010821
                                            WO 2002-US275
                                                                W 20020108
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AB

16051b, 58199, 57805, 56739, 39362, and 23228 nucleic acid mols., which \*\*\*membrane\*\*\* - \*\*\*assocd\*\*\* . encode novel \*\*\*human\*\*\* \*\*\*protein\*\*\* family members, and human cell surface protein family members. The invention also provides antisense nucleic acid mols., recombinant expression vectors contg. 16051a, 16051b, 58199, 57805, 56739, 39362, or 23228 nucleic acid mols., host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 16051a, 16051b, 58199, 57805, 56739, 39362, or 23228 gene has been introduced or disrupted. The invention still further provides isolated 16051a, 16051b, 58199, 57805, 56739, 39362, or 23228 proteins, fusion proteins, antigenic peptides and anti-16051a, 16051b, 58199, 57805, 56739, 39362, or 23228 antibodies. The cDNA sequences and the encoded amino acid sequences of the polypeptides of the invention are provided. Tissue-specific expression profiles and structural motifs of the polypeptides are provided. Diagnostic and drug screening methods utilizing compns. of the invention are also provided.

ANSWER 8 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:234123 CAPLUS

DOCUMENT NUMBER:

138:363600

TITLE:

A genomic view of the human-Bacteroides

AUTHOR (S):

thetaiotaomicron symbiosis Xu, Jian; Bjursell, Magnus K.; Himrod, Jason; Deng, Su; Carmichael, Lynn K.; Chiang, Herbert C.; Hooper,

Lora V.; Gordon, Jeffrey I.

CORPORATE SOURCE:

Department of Molecular Biology and Pharmacology, Washington University School of Medicine, St. Louis,

MO. 63110, USA

SOURCE:

Science (Washington, DC, United States) (2003),

299 (5615), 2074-2076

CODEN: SCIEAS; ISSN: 0036-8075

PUBLISHER:

American Association for the Advancement of Science

DOCUMENT TYPE:

Journal English

LANGUAGE:

The human gut is colonized with a vast community of indigenous

microorganisms that help shape our biol. The complete genome sequence is now presented for the Gram-neg. anaerobe Bacteroides thetaiotaomicron, a dominant member of our normal distal intestinal microbiota. Its 4779-member proteome includes an elaborate app. for acquiring and hydrolyzing otherwise indigestible dietary polysaccharides and an assocd. environment-sensing system consisting of a large repertoire of extracytoplasmic function sigma factors and one- and two-component signal transduction systems. These and other expanded paralogous groups shed light on the mol. mechanisms underlying symbiotic host-bacterial relationships in our intestine. The genome sequence is deposited in GenBank/EMBL/DDBJ under accession no. AE015928 and in the RefSeq database under accession no. NC\_004663.

REFERENCE COUNT:

20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

DUPLICATE 4 ANSWER 9 OF 25 MEDLINE on STN L4

ACCESSION NUMBER:

2003414953 MEDIATNE

DOCUMENT NUMBER:

PubMed ID: 12812916

TITLE:

**AUTHOR:** 

Rat kidney MAP17 induces cotransport of Na-mannose and

Na-glucose in Xenopus laevis oocytes.

CORPORATE SOURCE:

Blasco Tatiana; Aramayona Jose J; Alcalde Ana I; Catalan Julia; Sarasa Manuel; Sorribas Victor

Department of Toxicology, University of Zaragoza, Zaragoza

E50013, Spain.

SOURCE:

American journal of physiology. Renal physiology, (2003

Oct) 285 (4) F799-810.

Journal code: 100901990. ISSN: 0363-6127.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH: 200310 ENTRY DATE:

Entered STN: 20030905

Last Updated on STN: 20031011 Entered Medline: 20031010

Renal reabsorption is the main mechanism that controls mannose

homeostasis. This takes place through a specific Na-coupled uphill transport system, the molecular identity of which is unknown. We prepared and screened a size-selected rat kidney cortex cDNA library through the expression of mannose transport in Xenopus laevis oocytes. We have identified a membrane protein that induces high-affinity and specific Na-dependent transport of d-mannose and d-glucose in X. laevis oocytes, most likely through stimulation of the capacity of an endogenous transport system of the oocyte. Sequencing has revealed that the cDNA encodes the counterpart of the \*\*\*human\*\*\* \*\*\*membrane\*\*\* - \*\*\*associated\*\*\*

\*\*\*protein\*\*\* MAP17, previously known by its overexpression in renal, colon, lung, and breast carcinomas. We show that MAP17 is a 12.2-kDa nonglycosylated membrane protein that locates to the brush-border plasma membrane and the Golqi apparatus of transfected cells and that it is expressed in the proximal tubules of the kidney cortex and in the spermatids of the seminiferous tubules. It spans twice the cell membrane, with both termini inside the cell, and seems to form homodimers through intracellular Cys55, a residue also involved in transport expression. MAP17 is responsible for mannose transport expression in oocytes by rat kidney cortex mRNA. The induced transport has the functional characteristics of a Na-glucose cotransporter (SGLT), because d-glucose and alpha-methyl-d-glucopyranoside are also accepted substrates that are inhibited by phloridzin. The corresponding transporter from the proximal tubule remains to be identified, but it is different from the known mammalian SGLT-1, -2, and -3.

ANSWER 10 OF 25 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER:

2002-305578 [35] WPIDS

DOC. NO. CPI:

C2002-088994

TITLE:

New \*\*\*human\*\*\* \*\*\*membrane\*\*\* - \*\*\*associated\*\*\* \*\*\*protein\*\*\* 32.78 and encoding polynucleotide, useful for treating hormone metabolism disturbance disease and

nervous system dysfunction disease.

DERWENT CLASS:

B04 D16

INVENTOR(S):

MAO, Y; XIE, Y

PATENT ASSIGNEE(S): (SHAN-N) SHANGHAI BIODOOR GENE DEV CO LTD

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

CN 1333253

A 20020130 (200235)\*

## APPLICATION DETAILS:

| PATENT NO  | KIND | APPLICATION    | DATE     |
|------------|------|----------------|----------|
|            |      |                |          |
| CM 1333253 | Δ    | CM 2000-117042 | 20000707 |

PRIORITY APPLN. INFO: CN 2000-117042 20000707

2002-305578 [35] WPIDS

CN 1333253 A UPAB: 20020603

\*\*\*membrane\*\*\* - \*\*\*associated\*\*\* NOVELTY - A \*\*\*human\*\*\* \*\*\*protein\*\*\* 32.78, encoding polynucleotide and producing this polypeptide by DNA recombination technology, are new. The protein is useful for treating hormone metabolism disturbance disease and nervous system dysfunction disease. Also disclosed are an antagonist for resisting the polypeptide and its therapeutic action, and the application of the

encoding polynucleotide.

Dwg.0/0

ANSWER 11 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:240826 CAPLUS

DOCUMENT NUMBER:

136:274316

Nucleic acids encoding human kidney tumor overexpressed membrane protein 1 isoforms

INVENTOR(S): Zhang, Jian

PATENT ASSIGNEE(S):

Aeomica, Inc., USA

SOURCE:

TITLE:

PCT Int. Appl., 418 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

HANGUAGE: English
FAMILY ACC. NUM. COUNT: 90
PATENT INFORMATION:

| PATENT NO.                     | KIND             | DATE                   | APPLICATION NO.                                | DATE                                    |
|--------------------------------|------------------|------------------------|--|---|
| WO 2002024750                  | A2               | 20020328               | WO 2001-US29656                                | 20010921                                |
| WO 2002021750                  | A3               | 20031106               | 2001 0525050                                   | 20020022                                |
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| LS, LT,                        | LU, LV, MA       | , MD, MG,              | MK, MN, MW, MX, MZ, N                          | O, NZ, PH, PL,                          |
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| GB 2360284<br>GB 2360284       | A1<br>B2         | 20010919               | GB 2000-24263                                  | 20001004                                |
| WO 2001057270                  | A2               | 20020227 20010809      | WO 2001-US661                                  | 20010130                                |
| WO 2001057270                  | A3               | 20030213               | ##C 2001 05001                                 | 20010130                                |
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| WO 2001057271                  | A2               | 20010809               | WO 2001-US662                                  | 20010130                                |
| WO 2001057271                  | A3               | 20030220               | DA DO DO DO DV D                               | AZ CA CU CAI                            |
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| WO 2001057272                  | A3               | 20030103               |  |   |
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             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
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     GB 2396351
                           A1
                                 20040623
                                              GB 2004-6165
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     GB 2396351
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                                                                       20010130
     US 2002048763
                           A1
                                 20020425
                                              US 2001-864761
                                                                       20010523
     AU 2001092957
                           A5
                                 20020402
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                                                                       20030930
PRIORITY APPLN. INFO.:
                                              US 2000-234687P
                                                                   Р
                                                                      20000921
                                              US 2000-236359P
                                                                   P 20000927
                                              GB 2000-24263
                                              WO 2001-US661
                                                                   A2 20010130
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WO 2001-US662
                    A2 20010130
WO 2001-US663
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WO 2001-US664
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WO 2001-US665
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WO 2001-US668
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WO 2001-US669
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WO 2001-US670
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US 2001-864761
                    A2 20010523
US 2001-315676P
                   P 20010828
US 2001-335941P
                    P 20011024
US 2000-180312P
                   Ρ
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US 2000-207456P
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US 2000-608408
                   A 20000630
US 2000-632366
                   A 20000803
US 2001-774203
                   A2 20010129
GB 2002-16928
                   A3 20010130
GB 2002-17714
                   A3 20010130
GB 2002-18673
                   A3 20010130
US 2001-266860P
                   P 20010205
US 2001-827998
                   A3 20010406
WO 2001-US29656
                   W 20010921
US 2001-326105P
                    р
                      20010928
US 2001-327898P
                   P 20011009
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The invention provides isolated nucleic acids that encode human kidney tumor overexpressed membrane protein 1 (KTOM1), which has two isoforms, KTOM1a and KTOM1b, and has protein-protein interaction activity and high expression in kidney tumors. KTOMla shares certain protein domains and an overall structural organization with other proteins that contain caldesmon and ERM (ezrin/radixin/moesin) motifs as well as a leucine-rich repeat (LRR) motif with five leucine-rich domains. KTOMla is expressed in liver, bone marrow, brain, heart, lung, kidney, colon, muscle, testis, uterus, and placenta. The KTOM1a gene is organized with 25 exons on human chromosome 2q35. The invention also relates to KTOM1 fragments, vectors for propagating and expressing human KTOM1 nucleic acids, host cells comprising the nucleic acids and vectors of the present invention, proteins, protein fragments, and protein fusions of the novel human KTOM1 isoforms, and antibodies thereto. The invention further provides transgenic cells and non-human organisms comprising human KTOM1 nucleic acids, and transgenic cells and non-human organisms with targeted disruption of the endogenous ortholog of the human KTOM1 gene. The invention further provides pharmaceutical formulations of the nucleic acids, proteins, and antibodies of the present invention, and diagnostic. investigational, and therapeutic methods based on the human KTOM1 nucleic acids, proteins, and antibodies of the present invention.

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ANSWER 12 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
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ACCESSION NUMBER:

2002:31524 CAPLUS

DOCUMENT NUMBER:

136:80950

TITLE .

Protein and cDNA sequences of \*\*\*human\*\*\*

\*\*\*membrane\*\*\*

\*\*\*associated\*\*\* \*\*\*protein\*\*\*

Zupar1

INVENTOR(S):

Sheppard, Paul O.; Bishop, Paul D.; Presnell, Scott

R.; Gilbert, Teresa

PATENT ASSIGNEE(S):

Zymogenetics, Inc., USA PCT Int. Appl., 94 pp.

SOURCE:

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO.     | KIND DATE   | APPLICATION N       | O. DATE             |
|----------------|-------------|---------------------|---------------------|
|                |             |                     |                     |
| WO 2002002636  | A2 20020    | 0110 WO 2001-US211  | 67 20010702         |
| WO 2002002636  | A3 20020    | 0502                |                     |
| W: AE, AG, AL, | AM, AT, AU, | AZ, BA, BB, BG, BR, | BY, BZ, CA, CH, CN, |
| CO, CR, CU,    | CZ, DE, DK, | DM, DZ, EC, EE, ES, | FI, GB, GD, GE, GH, |
| GM, HR, HU,    | ID, IL, IN, | IS, JP, KE, KG, KP, | KR, KZ, LC, LK, LR, |
| LS, LT, LU,    | LV, MA, MD. | MG. MK. MN. MW. MX. | MZ. NO. NZ. PL. PT  |

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RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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     US 2002110855
                          A1
                                20020815
                                            US 2001-893737
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                                20020620
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                          A1
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PRIORITY APPLN. INFO.:
                                            US 2000-215446P
                                                                 Þ
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                                            US 2001-285424P
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                                                                    20010420
                                            US 2001-895834
                                                                A3 20010629
                                            US 2001-895836
                                                                 B1 20010629
AB
     The present invention provides protein and cDNA sequences of novel
       ***human***
                       ***membrane***
                                          ***assocd*** . ***protein***
     Zuparl, which exhibits homol. to known plasminogen activator proteins.
     Zuparl is highly expressed in testis tissue indicating an assocn. with
     spermatogenesis. Zuparl gene is mapped on human chromosome 19q13.32. The
     invention further provides therapeutic and diagnostic methods utilizing
     the polynucleotides, polypeptides, and antagonists of the polypeptides.
     ANSWER 13 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         2002:10645 CAPLUS
DOCUMENT NUMBER:
                         136:80917
                         Protein and cDNA sequences of a novel
TITLE:
                                                                  ***human***
                           ***membrane*** - ***associated***
                                                                    ***protein***
                         sequence homolog and uses thereof
INVENTOR(S):
                         Glucksmann, Maria Alexandria
PATENT ASSIGNEE(S):
                         Millennium Pharmaceuticals, Inc., USA
SOURCE:
                         PCT Int. Appl., 106 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
     WO 2002000841
                          A2
                                20020103
                                            WO 2001-US19963
                                                                    20010625
     WO 2002000841
                          А3
                                20030206
     WO 2002000841
                          C2
                                20030306
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 2001070075
                          Α5
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                                            AU 2001-70075
                                                                    20010625
     US 2002172996
                          A1
                                20021121
                                            US 2001-891008
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    US 2003096305
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                                            US 2002-162435
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PRIORITY APPLN. INFO.:
                                            US 2000-214220P
                                                                    20000623
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                                                                    20000418
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                                                                Р
                                                                    20000519
                                            US 2000-213963P
                                                                P
                                                                    20000623
                                            US 2000-226612P
                                                                P 20000821
                                            US 2001-260286P
                                                                Р
                                                                    20010108
                                            US 2001-836499
                                                                A2 20010417
                                            WO 2001-US12420
                                                                W 20010417
                                            WO 2001-US16013
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                                                                W
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                                            WO 2001-US19963
                                                                W
                                                                   20010625
                                            WO 2001-US41811
                                                                W
                                                                   20010821
                                            WO 2002-US275
                                                                W 20020108
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AB The invention provides protein and cDNA sequences of a novel human protein, designated 58199, which has sequence homol. with membrane-assocd. proteins. The invention also provides antisense nucleic acid mols.,

recombinant expression vectors contg. 58199 nucleic acid mols., host cells into which the expression vectors have been introduced, and non-human transgenic animals in which a 58199 gene has been introduced or disrupted. The invention still further provides isolated 58199 proteins, fusion proteins, antigenic peptides and anti-58199 antibodies. Diagnostic methods utilizing compns. of the invention are also provided.

ANSWER 14 OF 25 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER:

2002:419762 BIOSIS

DOCUMENT NUMBER:

PREV200200419762

TITLE:

Identification of genes responsible for

demethylation-induced growth inhibition of human lung

cancer cells.

AUTHOR(S):

Yuan, Bao-Zhu [Reprint author]; Reynolds, Steven [Reprint

authorl

CORPORATE SOURCE:

Genetic Susceptibility Laboratory, Toxicology and Molecular

Biology Branch, National Institute for Occupational Safety

and Health, Morgantown, WV, USA

SOURCE:

Proceedings of the American Association for Cancer Research

Annual Meeting, (March, 2002) Vol. 43, pp. 1123-1124.

print.

Meeting Info.: 93rd Annual Meeting of the American

Association for Cancer Research. San Francisco, California,

USA. April 06-10, 2002.

ISSN: 0197-016X.

DOCUMENT TYPE:

Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE ·

English

ENTRY DATE:

Entered STN: 7 Aug 2002

Last Updated on STN: 7 Aug 2002

ANSWER 15 OF 25 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 5 WPIDS

ACCESSION NUMBER: DOC. NO. CPI:

2001-168860 [17] C2001-050487

TITLE:

Isolated polypeptide with a \*\*\*human\*\*\*

\*\*\*associated\*\*\* \*\*\*membrane\*\*\* \*\*\*protein\*\*\* sequence is useful for the diagnosis, prevention and

treatment of cell proliferative, autoimmune/inflammatory,

neurological and gastrointestinal disorders.

DERWENT CLASS:

B04 D16

INVENTOR(S): AZIMZAI, Y; BANDMAN, O; BAUGHN, M R; BURFORD, N; LAL, P;

LU, D A M; PATTERSON, C; TANG, Y T; YUE, H;

ARIVZU-PATTERSON, C; LAL, P G

PATENT ASSIGNEE(S): (INCY-N) INCYTE GENOMICS INC; (AZIM-I) AZIMZAI Y;

(BAND-I) BANDMAN O; (BAUG-I) BAUGHN M R; (BURF-I) BURFORD

N; (LALP-I) LAL P; (LUDA-I) LU D A M; (PATT-I) PATTERSON C; (TANG-I) TANG Y T; (YUEH-I) YUE H; (ARIV-I)

ARIVZU-PATTERSON C; (LALP-I) LAL P G 95

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK

WO 2001012662 A2 20010222 (200117)\* EN 173

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM

DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC

LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

218

AU 2000069068 A 20010313 (200134)

EP 1206543 A2 20020522 (200241)

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT

RO\_SE SI

US 2002182671 A1 20021205 (200301)

US 2003124649 A1 20030703 (200345)

JP 2003527089 W 20030916 (200362)

APPLICATION DETAILS:

| PATENT NO     | KIND           | APPLICATION     | DATE     |  |  |
|---------------|----------------|-----------------|----------|--|--|
| WO 2001012662 | A2             | WO 2000-US22315 | 20000814 |  |  |
| AU 2000069068 | A              | AU 2000-69068   | 20000814 |  |  |
| EP 1206543    | A2             | EP 2000-957449  | 20000814 |  |  |
|               |                | WO 2000-US22315 | 20000814 |  |  |
| US 2002182671 | Al Provisional | US 1999-149641P | 19990817 |  |  |
|               | Provisional    | US 1999-164203P | 19991109 |  |  |
|               |                | US 2001-965529  | 20010926 |  |  |
| US 2003124649 | Al Provisional | US 1999-149641P | 19990817 |  |  |
|               | Provisional    | US 1999-164203P | 19991109 |  |  |
|               |                | US 2001-969680  | 20011002 |  |  |
| JP 2003527089 | W              | WO 2000-US22315 | 20000814 |  |  |
|               |                | JP 2001-517560  | 20000814 |  |  |

#### FILING DETAILS:

| PAT | CENT NO         | KII | ND    |    | I  | PATENT NO  |  |  |  |
|-----|-----------------|-----|-------|----|----|------------|--|--|--|
|     | ·- <del>-</del> |     |       |    |    |            |  |  |  |
| AU  | 2000069068      | Α   | Based | on | WO | 2001012662 |  |  |  |
| EΡ  | 1206543         | A2  | Based | on | WO | 2001012662 |  |  |  |
| JΡ  | 2003527089      | W   | Based | on | WO | 2001012662 |  |  |  |

PRIORITY APPLN. INFO: US 1999-164203P 19991109; US 1999-149641P 19990817

AN 2001-168860 [17] WPIDS

AB WO 200112662 A UPAB: 20011129

NOVELTY - An isolated polypeptide (I) with a \*\*\*human\*\*\*

\*\*\*membrane\*\*\* \*\*\*associated\*\*\* \*\*\*protein\*\*\* (MEMAP) sequence, is new.

DETAILED DESCRIPTION - An isolated polypeptide (I) comprises an amino acid (aa) sequence of one of 34 \*\*\*human\*\*\* \*\*\*membrane\*\*\*

\*\*\*associated\*\*\* \*\*\*protein\*\*\* (MEMAP) sequences given in the specification, a sequence with at least 70% identity to the MEMAP sequences, or a biologically active fragment or immunogenic fragment of the MEMAP sequences.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polynucleotide (II) encoding (I);
- (2) an isolated polynucleotide comprising:
- (a) a sequence with at least 90% polynucleotide sequence identity to the sequence of (II),
  - (b) a sequence complementary to (II);
  - (c) a sequence complementary to (a); or
  - (d) an RNA equivalent of (a)-(c);
- (3) a recombinant polypeptide (III) comprising a promoter sequence linked operably to (II);
  - (4) a cell transformed with (III);
  - (5) a transgenic organism transformed with (III);
- (6) an isolated polynucleotide comprising at least 60 contiguous nucleotides of (II);
- (7) a method for detecting a target polynucleotide in a sample comprising:
- (a) hybridizing the sample with a probe containing at least 20 contiguous nucleotides of a sequence complementary to the target polynucleotide; and
- (b) detecting the presence or absence of the hybridization complex and optionally the amount of complex formed;
- (8) a method for detecting a target polynucleotide in a sample comprising:
- (a) amplifying the target polynucleotide or a polynucleotide fragment by polymerase chain reaction; and
- (b) detecting the presence or absence and optionally the amount of the polynucleotide in the sample;
- (9) a method for producing (I) comprising culturing the host cell of (4) and recovering the polypeptide from the host cell culture;
  - (10) an isolated antibody which specifically binds to (I);
- (11) a method of screening for a compound effective as an agonist or antagonist of (I) by exposing a sample comprising (I) to a test compound and detecting agonist or antagonist activity in the sample;
- (12) a method of screening for a compound that specifically binds to (I) by combining (I) with a test compound under suitable conditions and

detecting binding of the test compound to (I);

(13) a method of screening for a compound that modulates activity of (I) by combining (I) with a test compound under suitable conditions, assessing the activity of (I) in the presence of the test compound and comparing) the activity to that in the absence of the test compound;

- (14) a method for screening a compound for effectiveness in altering expression of (II) comprising exposing a sample comprising (II) to a test compound and detecting altered expression of (II); and
  - (15) a method for assessing toxicity of a test compound comprising:
- (a) treating a biological sample containing nucleic acids with the test compound;
- (b) hybridizing the nucleic acids in the sample with a probe comprising at least 20 nucleotides of (II);
  - (c) detecting the amount of hybridization complex formed; and
- (d) comparing the amount formed in the treated sample to the amount from an untreated sample where a difference is indicative of toxicity of the test compound.

ACTIVITY - Cytostatic; antiinflammatory; anticonvulsant; immunosuppressive; antiarteriosclerotic; antidiarrheic.

No biological data is given.

MECHANISM OF ACTION - Gene therapy; antagonist or agonist of human membrane associated proteins.

USE - (I) and an agonist of (I) are used to treat a disease or condition associated with decreased expression of functional MEMAP and antagonists of (I) are used to treat a disease or condition associated with overexpression of functional MEMAP (claimed). These disorders include cell proliferative, autoimmune/inflammatory, neurological and gastrointestinal disorders. The polynucleotides and polypeptides are also used for the diagnosis of these disorders.

Specific examples of these disorders include cancer, inflammation, atherosclerosis, epilepsy and diarrhea.

(I) can be used to screen for compounds which specifically bind MEMAP (claimed) including antibodies, oligonucleotides, proteins and small molecules. (II) can be used to prepare transgenic animals which can be studied to provide information concerning human disease.

Anti-MEMAP antibodies are useful in immunoassays for the detection of MEMAP protein and can be used as antagonists to treat or prevent a disorder associated with MEMAP. Polynucleotides encoding MEMAP can be delivered to target cells with genetic abnormalities with respect to the expression of MEMAP to treat or prevent a disorder associated with MEMAP. Dwq.0/0

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ANSWER 16 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN
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ACCESSION NUMBER: 2001:396898 CAPLUS

DOCUMENT NUMBER: 135:15109

TITLE: \*\*\*Human\*\*\*

\*\*\*membrane\*\*\* - \*\*\*assocd\*\*\*

\*\*\*protein\*\*\* 37 and its cDNA and use thereof

INVENTOR(S): Mao, Yumin; Xie, Yi

PATENT ASSIGNEE(S): Bioroad Gene Development Ltd. Shanghai, Peop. Rep.

China

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT    | PATENT NO.    |     |      | KIN | KIND DATE   |     |               | APPLICATION NO. |     |      |          |       |     | DATE |      |       |     |
|--------|---------------|-----|------|-----|-------------|-----|---------------|-----------------|-----|------|----------|-------|-----|------|------|-------|-----|
|        |               |     |      |     |             |     |               |                 |     |      |          |       |     |      |      |       |     |
| WO     | WO 2001038363 |     |      | A1  | A1 20010531 |     | WO 2000-CN438 |                 |     |      | 20001120 |       |     |      |      |       |     |
|        | W:            | ΑE, | AG,  | AL, | AM,         | ΑT, | ΑU,           | ΑZ,             | BA, | BB,  | BG,      | BR,   | BY, | BZ,  | CA,  | CH,   | CR, |
|        |               | CU, | CZ,  | DE, | DK,         | DM, | DZ,           | EE,             | ES, | FI,  | GB,      | GD,   | GE, | GH,  | GM,  | HR,   | HU, |
|        |               | ID, | IL,  | IN, | IS,         | JP, | KΕ,           | KG,             | ΚP, | KR,  | KZ,      | LC,   | LK, | LR,  | LS,  | LT,   | LU, |
|        |               | LV, | MΑ,  | MD, | MG,         | MK, | MN,           | MW,             | MX, | MZ,  | NO,      | NZ,   | PL, | PT,  | RO,  | RU,   | SD, |
|        |               | SE, | SG,  | SI, | SK,         | SL, | TJ,           | TM,             | TR, | TT,  | TZ,      | UA,   | UG, | US,  | UZ,  | VN,   | YU, |
|        |               | ZA, | ZW,  | AM, | ΑZ,         | BY, | KG,           | ΚZ,             | MD, | RU,  | TJ,      | TM    |     |      |      |       |     |
|        | RW:           | GH, | GM,  | KE, | LS,         | MW, | ΜZ,           | SD,             | SL, | SZ,  | TZ,      | UG,   | ZW, | AT,  | BE,  | CH,   | CY, |
|        |               | DE, | DK,  | ES, | FI,         | FR, | GB,           | GR,             | ΙE, | IT,  | LU,      | MC,   | NL, | PT,  | SE,  | TR,   | BF, |
|        |               | ВJ, | CF,  | CG, | CI,         | CM, | GA,           | GN,             | GW, | ML,  | MR,      | NE,   | SN, | TD,  | TG   |       |     |
| CN     | 1297          | 901 |      |     | Α           |     | 2001          | 0606            | (   | CN 1 | 999-:    | 12409 | 93  |      | 19   | 9991: | 124 |
| IORITY | APP           | LN. | INFO | . : |             |     |               |                 | - ( | CN 1 | 999-1    | L2409 | €3  | i    | A 19 | 9991  | 124 |

The invention provides cDNA sequences of a novel \*\*\*human\*\*\* \*\*\*membrane\*\*\* - \*\*\*assocd\*\*\* . \*\*\*protein\*\*\* 37 cloned from placenta brain, which has sequence homol. with human Copines I protein family. The invention also relates to constructing membrane-assocd. protein 37 gene expression vectors to prep. recombinant membrane-assocd. protein 37 protein using Escherichia coli cells or eukaryotic cells. Methods of expressing and prepg. recombinant membrane-assocd. protein 37 protein and its antibody are described. Methods of using membrane-assocd. protein 37 gene or protein products for the treatment of various kinds of diseases, such as cancer, blood diseases, HIV infection, immune diseases and inflammation are also disclosed.

1

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 17 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

REFERENCE COUNT:

2001:654731 CAPLUS

135:206497

TITLE:

Primers for synthesizing full-length cDNA clones from

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

human tissues

INVENTOR(S):

Ota, Toshio; Nishikawa, Tetsuo; Isogai, Takao;

Hayashi, Koji; Ishii, Shizuko; Kawai, Yuri; Wakamatsu,

Ai; Sugiyama, Tomoyasu; Nagai, Keiichi; Kojima,

Shinichi; Otsuki, Tetsuji; Koga, Hisashi

PATENT ASSIGNEE(S):

Helix Research Institute, Japan

SOURCE:

Eur. Pat. Appl., 1381 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. |            |       |      | KIND        |           | DATE     |       |                | APPLICATION NO. |    |       |      |     |          | DATE       |       |     |  |
|------------|------------|-------|------|-------------|-----------|----------|-------|----------------|-----------------|----|-------|------|-----|----------|------------|-------|-----|--|
|            |            |       |      |             |           | -        |       |                | -               |    |       |      |     |          |            |       |     |  |
| EP         | EP 1130094 |       |      | A2 20010905 |           |          | F     | EP 2000-114089 |                 |    |       |      |     | 20000707 |            |       |     |  |
| EP         | EP 1130094 |       |      | A3          |           | 20011121 |       |                |                 |    |       |      |     |          |            |       |     |  |
|            | R:         | AT,   | BE,  | CH,         | DE,       | DK       | , ES, | FR,            | GB,             | GR | , IT, | LI,  | LU, | ΝĹ,      | SE         | , MC, | PT, |  |
|            |            | ΙE,   | SI,  | LT,         | LV,       | FI       | , RO  |                |                 |    |       |      |     |          |            |       |     |  |
| JP :       | 20020      | 0173  | 75   |             | A2        |          | 2002  | 0122           | Ċ               | JΡ | 2000- | 2531 | 72  |          |            | 20000 | 707 |  |
| EP :       | 13969      | 543   |      |             | A2        |          | 2004  | 0310           | F               | ΞP | 2003- | 2563 | 8   |          |            | 20000 | 707 |  |
| EP         | 13969      | 543   |      |             | <b>A3</b> |          | 2004  | 0331           |                 |    |       |      | -   |          |            |       |     |  |
|            | R:         | ÄΤ,   | BE,  | CH,         | DE,       | DK       | ES,   | FR,            | GB,             | GR | , IT, | LI,  | LU, | NL,      | SE         | , MC, | PT, |  |
|            |            | ΙE,   | FI,  | CY          |           |          |       |                |                 |    |       |      |     |          |            |       | -   |  |
| PRIORITY   | APPI       | LN. I | INFO | . :         |           |          |       |                | Ċ               | JΡ | 1999- | 1944 | 86. |          | A          | 19990 | 708 |  |
|            |            |       |      |             |           |          |       |                | i               | JΡ | 2000- | 1187 | 74  |          | A          | 20000 | 111 |  |
|            |            |       |      |             |           |          |       |                | ن               | JP | 2000- | 1837 | 65  |          | A          | 20000 | 502 |  |
|            |            |       |      |             |           |          |       |                | E               | 2P | 2000- | 1140 | 89  |          | <b>A</b> 3 | 20000 | 707 |  |

Primers for synthesizing full-length cDNAs and their use are provided. Eight hundred thirty cDNAs encoding human proteins were isolated and nucleotide sequences of 5'-, and 3'-ends of the cDNAs were detd. Furthermore, primers for synthesizing the full-length cDNA are provided to clarify the function of the protein encoded by the CDNA. The full-length cDNAs of the present invention contg. the translation start sites provide information useful for analyzing the functions of the proteins. Tissue expression profiles and homol. comparisons with sequences from public databases are provided for each of the 830 cDNA clones.

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ANSWER 18 OF 25
                     WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 6
ACCESSION NUMBER:
                     2000-687346 [67]
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DOC. NO. NON-CPI:

DOC. NO. CPI:

N2000-508144

C2000-209235

\*\*\*Human\*\*\* \*\*\*membrane\*\*\* - \*\*\*associated\*\*\* \*\*\*protein\*\*\* , useful for diagnosis and treatment of

cell signaling, cell differentiation and cell proliferation disorders such as cancer, and for

identifying agonists and antagonists.

DERWENT CLASS: INVENTOR(S):

B04 D16 S03

AZIMZAI, Y; BANDMAN, O; BAUGHN, M R; HILLMAN, J L; LAL,

P; REDDY, R; TANG, Y T; YUE, H

PATENT ASSIGNEE(S): COUNTRY COUNT:

(INCY-N) INCYTE GENOMICS INC

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000065054 A2 20001102 (200067) \* EN 99

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 2000044835 A 20001110 (200109)

EP 1173566 A2 20020123 (200214) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 2002542782 W 20021217 (200312) 127

#### APPLICATION DETAILS:

| PATENT NO     | KIND | APPLICATION     | DATE     |
|---------------|------|-----------------|----------|
| WO 2000065054 | A2   | WO 2000-US10884 | 20000420 |
| AU 2000044835 | A    | AU 2000-44835   | 20000420 |
| EP 1173566    | A2   | EP 2000-926278  | 20000420 |
|               |      | WO 2000-US10884 | 20000420 |
| JP 2002542782 | W    | JP 2000-614390  | 20000420 |
|               |      | WO 2000-US10884 | 20000420 |

## FILING DETAILS:

| PATENT NO     | KIND        | PATENT NO     |  |  |  |  |  |
|---------------|-------------|---------------|--|--|--|--|--|
|               |             |               |  |  |  |  |  |
| AU 2000044835 | A Based on  | WO 2000065054 |  |  |  |  |  |
| EP 1173566    | A2 Based on | WO 2000065054 |  |  |  |  |  |
| JP 2002542782 | W Based on  | WO 2000065054 |  |  |  |  |  |

PRIORITY APPLN. INFO: US 1999-140580P 1 1999-130694P 1999

19990623; US 19990423

N 2000-687346 [67] WPIDS

AB WO 200065054 A UPAB: 20011129

NOVELTY - An isolated \*\*\*human\*\*\* \*\*\*membrane\*\*\*

 ${\tt DETAILED}$  <code>DESCRIPTION</code> - <code>INDEPENDENT</code> <code>CLAIMS</code> are also included for the following:

- (1) an isolated polynucleotide (II) or its complement encoding (I), consisting of a sequence (S2) of 1147, 1260, 2387, 2172, 2328, 1361, 789, 1793, 3694, 2000, 2973, 2394, 1853, 3617, 1029, 1923 or 837 bp (or a naturally occurring polynucleotide sequence having 90% sequence identity to S2) or an RNA equivalent of (II), all given in the specification;
- (2) a recombinant polynucleotide (III) comprising a promoter sequence operably linked to (II);
  - (3) a cell transformed with (III);
  - (4) preparation of (I);
  - (5) a transgenic organism comprising (III);
  - (6) an antibody (IV) which binds to (I);
- (7) an isolated polynucleotide comprising at least 60 contiguous nucleotides of (II);
- (8) a composition (V) comprising (I), and an agonist or antagonist compound identified using (I); and
- (9) a method (VI) for detecting a target polynucleotide having the sequence of (II) in a sample by hybridizing the sample with a probe comprising at least 16 contiguous nucleotides complementary to and hybridizing to the target polynucleotide in the sample, and detecting the presence or absence of the hybridization complex.

ACTIVITY - Antiarteriosclerotic; cytostatic; antiinflammatory; immunosuppressive; antianemic; anticonvulsant; ophthalmological; antithyroid; antidiabetic; gynecological; osteopathic; nephrotropic.

No biological data is given.

MECHANISM OF ACTION - Modulator of cell signaling, differentiation and proliferation.

No biological data is given.

USE - (I) is useful for screening a compound for effectiveness as an agonist or antagonist of (I). (I) or the identified agonist or antagonist is useful for treating a disease or condition associated with decreased or increased expression of functional HUMAP. (II) is also useful for screening a compound for effectiveness in altering expression of a target polynucleotide comprising the sequence of (II). Diseases treated include cell proliferative disorders such as actinic keratosis, arteriosclerosis, cancer (including breast, bladder, bone marrow, brain and uterus cancer), cell differentiation disorders including developmental disorders such as renal tubular acidosis, anemia, Cushing's syndrome, epilepsy, a disorder of cell signaling including endocrine disorders such as disorders of the hypothalamus and pituitary resulting from lesions such as thrombosis, infections, immunological disorders and complications due to head trauma, disorders associated with hyperpituitarism including acromegaly, disorders associated with hypothyroidism including goiter, hyperparathyroidism, pancreatic disorders such as Type I or Type II diabetes mellitus, infertility, endometriosis, osteoporosis, hypergonadal disorders associated with Leydig cell tumors and gynecomastia. Antibodies which specifically bind HUMAP may be used for the diagnosis of disorders associated with the expression of HUMAP, or in assays to monitor patients being treated with HUMAP or agonists, antagonists or inhibitors of HUMAP. Dwg.0/0

ANSWER 19 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:368580 CAPLUS

DOCUMENT NUMBER:

133:27371

TITLE:

Protein and cDNA sequences of novel human gene Zsig-43

APPLICATION NO.

DATE

INVENTOR(S): PATENT ASSIGNEE(S): Sheppard, Paul O.; Lok, Si

Zymogenetics, Inc., USA PCT Int. Appl., 88 pp.

SOURCE:

CODEN: PIXXD2

DATE

DOCUMENT TYPE:

Patent English

KIND

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

| 1111211   | 1 110. |       |       | 101111 | •    | D    |      |      |          |      |      |       |       |       |       |         |
|---|--------|-------|-------|--------|------|------|------|------|----------|------|------|-------|-------|-------|-------|---------|
| WO 20   | A1     |       | 2000  | 0602   |      |      |      |      | 19991115 |      |      |       |       |       |       |         |
| W   | : AE,  | AL,   | AM,   | ΑT,    | AU,  | ΑZ,  | BA,  | BB,  | BG,      | BR,  | BY,  | CA,   | CH,   | CN,   | CR,   | CU,     |
|   | CZ,    | DE,   | DK,   | DM,    | EE,  | ES,  | FI,  | GB,  | GD,      | GE,  | GH,  | GM,   | HR,   | HU,   | ID,   | IL,     |
|   | IN,    | IS,   | JP,   | KE,    | KG,  | ΚP,  | KR,  | ΚZ,  | LC,      | LK,  | LR,  | LS,   | LT,   | LU,   | LV,   | MD,     |
|   | MG,    | MK,   | MN,   | MW,    | MX,  | NO,  | NZ,  | PL,  | PT,      | RO,  | RU,  | SD,   | SE,   | SG,   | SI,   | SK,     |
|   | SL,    | ТJ,   | TM,   | TR,    | TT,  | UA,  | UG,  | ·UZ, | VN,      | YU,  | ZA,  | ZW,   | AM,   | ΑZ,   | BY,   | KG,     |
|   | KZ,    | MD,   | RU,   | TJ,    | TM   |      |      |      |          |      |      |       |       |       |       |         |
| R   | W: GH, | GM,   | KE,   | LS,    | MW,  | SD,  | SL,  | SZ,  | TZ,      | UG,  | ZW,  | ΑT,   | BE,   | CH,   | CY,   | DE,     |
|   | DK,    | ES,   | FI,   | FR,    | GB,  | GR,  | ΙE,  | ΙT,  | LU,      | MC,  | NL,  | PT,   | SE,   | BF,   | ВJ,   | CF,     |
|   | CG,    | CI,   | CM,   | GA,    | GN,  | GW,  | ML,  | MR,  | NE,      | SN,  | TD,  | TG    |       |       |       |         |
| PRIORITY A  | PPLN.  | INFO  | . :   |        |      |      |      |      | US 1     | 998- | 2004 | 17    | i     | A 1   | 9981  | 123     |
| AB The p  | resent | inve  | enti  | on p   | rovi | des  | prot | ein  | and      | cDNA | seq  | uenc  | es f  | or a  | new.  | ly      |
| identified ***human***  |        |       |       |        |      |      |      |      |          |      |      |       |       |       |       |         |
| ***protein*** gene, designated Zsig-43, which is believed to be a |        |       |       |        |      |      |      |      |          |      |      |       |       |       |       |         |
| recep   | tor.   | Rece  | otor  | s per  | rfor | m ma | ny f | unct | ions     | tha  | t ar | e es  | sent  | ial : | for   | the     |
| metab   | . and  | diff  | eren  | tiat:  | ion  | of c | ells | . A  | s su     | ch,  | this | cla   | ss o  | f pro | otei  | ns      |
| often   | provi  | des   | targ  | ets i  | for  | ther | apeu | tica | lly      | usef | ul d | rugs  | . Z   | sig-  | 43 p: | rotein  |
|   | ises a |       |       |        |      |      |      |      |          |      |      |       |       |       |       |         |
| trans   | membra | ne do | omai  | n, ai  | nd a | n in | trac | ellu | lar      | doma | in c | ontg  | . a j | puta  | tive  | SH2     |
| bindi   | ng dom | ain.  | The   | e Zs:  | ig-4 | 3 ge | ne r | esid | es o     | n hu | man  | chro  | mosom | me 1  | 7 at  |         |
| 17q21   | .1. T  | he in | nvent | tion   | als  | o re | late | s to | the      | tis  | sue  | dist: | ribu  | tion  | of :  | Zsig-43 |
| mRNA.   |        |       |       |        |      |      |      |      |          |      |      |       |       |       |       |         |
| REFERENCE   | COUNT: |       |       | 3      | T    | HERE | ARE  | 3 C  | ITED     | REF  | EREN | CES Z | AVAI  | LABL  | E FO  | R THIS  |

ANSWER 20 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1994:52589 CAPLUS

DOCUMENT NUMBER:

120:52589

TITLE:

A novel antigen (H47 Ag) on human lymphocytes involved

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

in T cell activation

AUTHOR (S): Hirohashi, Nobuyuki; Nakao, Masanobu; Kubo, Keisuke;

Yamada, Akira; Shichijo, Shigeki; Hara, Akinori;

Sagawa, Kimitaka; Itoh, Kyogo

CORPORATE SOURCE: SOURCE:

Sch. Med., Kurume Univ., Fukuoka, 830, Japan Cellular Immunology (1993), 152(2), 371-82

CODEN: CLIMB8; ISSN: 0008-8749

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Surface mols. involved in human T cell activation were investigated using a newly developed monoclonal antibody (H47 mAb). H47 antigen (Ag) recognized by H47 mAb was expressed on approx. 10% of resting T cells (mostly CD4-CD8+), 30% of PMA-activated T cells (both CD4+CD8- and CD4-CD8+), and most NK, B cells, and monocytes in the peripheral blood mononuclear cells (PBMC). H47 mAb immunopptd. a 100 or 120-kD mol. wt. (MW) membrane protein of T cells and monocytes under nonreducing or reducing conditions, resp., suggesting that H47 Ag consists of a single polypeptide that has intramol. disulfide bonds. H47 mAb significantly enhanced PMA-induced proliferation of PBMC in a monocyte-independent fashion. H47 mAb, however, failed to enhance T cell proliferation induced by anti-CD3 mAb, anti-CD2 mAb, or phytohemagglutinin (PHA). H47 mAb also enhanced PMA-induced interleukin-2 receptor (IL-2R) expression and IL-2 synthesis, but did not induce a change in intracellular free calcium ([Ca2+]i) of T cells. These results suggest that H47 Ag is a new membrane mol. involved in PMA-induced T cell activation.

ANSWER 21 OF 25 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER:

1992:491373 BIOSIS

DOCUMENT NUMBER:

PREV199243100573; BR43:100573

TITLE:

DYSTROPHIN AND ALZHEIMER'S DISEASE IMMUNOHISTOCHEMICAL

ANALYSIS OF CARBOXYL ROD AND AMINO DOMAINS.

AUTHOR(S):

MAGUIRE J [Reprint author]; LEWIS A; BILBAO J; STEVENS J;

TROGADIS J; OZANNE W; YOUNG B; COHEN S

CORPORATE SOURCE:

UNIV TORONTO, TORONTO, ONTARIO, CANADA

SOURCE:

Neurobiology of Aging, (1992) Vol. 13, No. SUPPL. 1, pp.

Meeting Info.: THIRD INTERNATIONAL CONFERENCE ON

ALZHEIMER'S DISEASE AND RELATED DISORDERS, ABANO TERME,

ITALY, JULY 12-17, 1992. NEUROBIOL AGING.

CODEN: NEAGDO. ISSN: 0197-4580.

DOCUMENT TYPE:

Conference; (Meeting) BR

FILE SEGMENT: LANGUAGE: ENGLISH

ENTRY DATE:

Entered STN: 3 Nov 1992

Last Updated on STN: 4 Nov 1992

ANSWER 22 OF 25 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1992:628602 CAPLUS

DOCUMENT NUMBER:

117:228602

TITLE:

Hem-1, a potential membrane protein, with expression

restricted to blood cells

AUTHOR (S):

Hromas, Robert; Collins, Steven; Raskind, Wendy;

Deaven, Larry; Kaushansky, Ken

CORPORATE SOURCE:

Med. Cent., Indiana Univ., Indianapolis, IN,

46202-5121, USA

SOURCE:

Biochimica et Biophysica Acta (1991), 1090(2), 241-4

CODEN: BBACAQ; ISSN: 0006-3002 Journal

DOCUMENT TYPE:

LANGUAGE: English

Overlapping cDNAs 3.8 kb in length contg. a long open reading frame were obtained that hybridized exclusively to transcripts from hematopoietic cells. Sequence anal. found 8 potential membrane domains and 2 possible cAMP/cGMP phosphorylation sites. This sequence exhibited no homologies with the EMBL/Genbank nucleic acid SwissProt or GenPept amino acid data bases. The gene is located at 12q13.1, a region of occasional translocations in hematopoietic neoplasia and a rare folic acid fragile site, Fra 12A.

ANSWER 23 OF 25 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 1991:490365 BIOSIS DOCUMENT NUMBER:

PREV199141103580; BR41:103580

TITLE:

AMYLOID PROTEIN PRECURSOR PROCESSING IN ALZHEIMER'S

AUTHOR (S):

SOURCE:

PASTERNACK J [Reprint author]; ESTUS S; PALMERT M; USIAK M;

CHEUNG T; YOUNKIN S

CORPORATE SOURCE:

CASE WESTERN RESERVE UNIV, CLEVELAND, OHIO 44106, USA Journal of Neurochemistry, (1991) Vol. 57, No. SUPPL, pp.

Meeting Info.: THIRTEENTH MEETING OF THE INTERNATIONAL SOCIETY FOR NEUROCHEMISTRY, SYDNEY, NEW SOUTH WALES,

AUSTRALIA, JULY 15-19, 1991. J NEUROCHEM.

CODEN: JONRA9. ISSN: 0022-3042.

DOCUMENT TYPE:

Conference; (Meeting)

FILE SEGMENT:

BR

ENGLISH

LANGUAGE:

ENTRY DATE:

Entered STN: 3 Nov 1991

Last Updated on STN: 4 Nov 1991

ANSWER 24 OF 25 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on

STN

ACCESSION NUMBER:

1990:412010 BIOSIS

DOCUMENT NUMBER:

PREV199090072811; BA90:72811

TITLE:

DIFFERENT MODES OF VANCOMYCIN AND D ALANYL-D-ALANINE

PEPTIDASE BINDING TO CELL WALL PEPTIDE AND A POSSIBLE ROLE

FOR THE VANCOMYCIN RESISTANCE PROTEIN.

AUTHOR(S):

KNOX J R [Reprint author]; PRATT R F

CORPORATE SOURCE:

DEP MOLECULAR AND CELL BIOL, UNIV CONNN, STORRS, CONN

06269-3125

SOURCE:

Antimicrobial Agents and Chemotherapy, (1990) Vol. 34, No.

7, pp. 1342-1347.

CODEN: AMACCQ. ISSN: 0066-4804.

DOCUMENT TYPE:

Article BA

FILE SEGMENT: LANGUAGE: ENTRY DATE:

ENGLISH

Entered STN: 17 Sep 1990 Last Updated on STN: 17 Sep 1990

A comparison was made of the binding modes of the bacterial cell wall precursor L-lysyl-D-alanyl-D-alanine to the glycopeptide antibiotic vancomycin and to the D-alanyl-D-alanine-cleaving peptidase of Streptomyces sp. strain R61, a model for cell wall-synthesizing enzymes whose X-ray three-dimensional structure is established. In each of the two pairings (vancomycin with peptide and DD-peptidase with peptide), polypeptide backbones were antiparallel, and the antibiotic or enzyme enveloped the peptide substrate from opposite sides. Hydrogen-bonding groups on the substrate which are involved with the DD-peptidase were shown to be different from the ones reported from nuclear magnetic resonance studies to be involved with vancomycin. Because of steric hindrance, the binding of either molecule to the substrate prevents the binding of the other molecule. Binding to the substrate by a D-alanyl-D-alanine-recognizing protein in a manner similar to that used by the DD-peptidase could explain recent observations of vancomycin resistance, in which a new membrane-associated protein has been detected.